Claims

1. (Cancelled)

2. (Currently Amended) The system of claim ~~1~~ 6, wherein said detector is arranged to detect infrared (IR) radiation absorption by said SiC body.

3. (Currently Amended) The system of claim ~~1~~ 6, wherein the thickness of said SiC body is in the approximate range of 400-2,000 micrometers.

4. (Currently Amended) The system of claim ~~1~~ 6, wherein said detector is arranged to detect increases in the resistance of said SiC body in response to said body receiving radiation having a wavelength less than about 10 micrometers.

5. (Currently Amended) The system of claim ~~1~~ 6, further comprising a filter arranged to limit the reception of radiation by said SiC body to a narrow wavelength band.

6. (Previously Presented) An electromagnetic radiation detection system, comprising:

a body of SiC having a thickness of at least about 400 micrometers, wherein said SiC has a single crystal structure, and

a detector arranged to detect acoustic absorption of electromagnetic radiation having a wavelength less than about 10 micrometers by said SiC body.

7. (Currently Amended) The system of claim ~~1~~ 6, wherein the thickness of said SiC body is uniform.

8. (Currently Amended) The system of claim ~~1~~ 6, wherein said SiC body has a radiation receiving surface that is flat.

9. (Currently Amended) An electromagnetic radiation detection method, comprising:

irradiating a body of SiC having a thickness of at least about 400 micrometers with electromagnetic radiation having a wavelength less than about 10 micrometers, said SiC body having a single crystal structure, and

detecting an acoustic absorption response of said SiC body to said radiation.

10. (Original) The method of claim 9, wherein said SiC body is irradiated with infrared (IR) radiation.

11. (Original) The method of claim 9, wherein the thickness of said SiC body is in the approximate range of 400-2,000 micrometers.

12. (Original) The method of claim 9, wherein said acoustic absorption is detected by detecting increases in the resistance of said SiC body in response to said radiation.

13. (Original) The method of claim 9, wherein said radiation comprises a band of multiple wavelengths.

14. (Currently Amended) An electromagnetic radiation detection method, comprising:

irradiating a body of SiC having a thickness of at least about 400 micrometers with electromagnetic radiation having a wavelength less than about 10 micrometers, said SiC body having a single crystal structure, and

detecting a response of said SiC body to said radiation.

15. (Original) The method of claim 14, wherein said SiC body is irradiated with infrared (IR) radiation.

16. (Original) The method of claim 14, wherein the thickness of said SiC body is in the approximate range of 400-2,000 micrometers.

17. (Original) The method of claim 14, wherein said response is detected by detecting increases in the resistance of said SiC body in response to said radiation.

18. (Previously Presented) The method of claim 14, wherein said SiC body has uniform thickness.

19. (Currently Amended) An electromagnetic radiation detection method, comprising:

irradiating a uniform thickness body of SiC with radiation having a wavelength less than about 10 micrometers, said SiC body having s single crystal structure, and

detecting acoustic absorption of said radiation by said body.

20. (Original) The method of claim 19, wherein said SiC body is irradiated with infrared (IR) radiation.

21. (Original) The method of claim 19, wherein said acoustic absorption is detected by detecting increases in the resistance of said SiC body in response to said radiation.

22. (Previously Presented) An electromagnetic radiation detection method, comprising:

irradiating a body of SiC with radiation having a wavelength less than about 10 micrometers, said SiC body having a single crystal structure, and

detecting acoustic absorption of said radiation by said body.

23. (Original) The method of claim 22, wherein said SiC body is irradiated with infrared (IR) radiation.

24. (Original) The method of claim 23, wherein said acoustic absorption is detected by detecting increases in the resistance of said SiC body in response to said radiation.

25. (Original) The method of claim 22, wherein said acoustic absorption is detected over a band of multiple wavelengths.

26. (Original) The method of claim 22, further comprising filtering said radiation to a narrow wavelength band prior to irradiating said SiC body.